



THE PILOT PEN CO., (THAILAND) LTD

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MATERIAL SAFETY DATA SHEET**1. Production & Company Identification**

1.1 Writing Ink Names	: WMK (Black,Red,Blue,Green,Pink,Violet)
1.2 Writing Instrument Names	: WBMK-M (Black, Red,Blue,Green,Pink,Violet) : WBMK-B (Black,Red,Blue,Green,Pink,Violet) : WBMK-R (Black,Red,Blue,Green,Pink,Violet)
1.3 Manufacturer / Supplier	: THE PILOT PEN CO.,(THAILAND)LTD.
Address	: 40/1-3 Moo 12 Bangbon 5 Rd. Nongkhaem, Bangkok 10160 Thailand
Telephone number	: (662) 429-3950
Fax number	: (662) 429-3954

2. Composition / Information on Ingredients

Writing Ink

Substance / Mixture

	<u>Cas no.</u>	<u>Weight (%)</u>
Methyl Isobutyl Ketone	108-10-1	57.5 ~ 61.5
n-Butyl Acetate	123-86-4	20.0 ~ 22.0
Carbon Black	1333-86-4	10.0 (Black Ink Only)

3. Hazards Identification

3.1 Writing Ink

Class name of Hazardous chemical for SDS in Japan

Flammable Liquid

Acute Toxic substances

1) Physical and Chemical hazards

: Flammable liquid

2) Adverse human health effects

: Irritating to eyes

: Irritating to skin

: Harmful by inhalation

: Harmful by swallowed

3) Environmental effect

: Not available

3.2 Writing Instrument

: Follow the local law and regulations in your country

4. First Aid Measures

Writing ink

- 4.1) Eye contact : Gently rinse the effected eyes with clean water for at least 15 minutes and refer for medical attention.
- 4.2) Skin contact : Wash the affected area under tepid running water using a mild soap
- 4.3) Inhalation : Remove the victim from the contamination immediately to fresh air and refer for medical attention.
- 4.4) Ingestion : Refer for medical attention



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5. Fire-Fighting Measures

Writing ink

- 5.1) Extinguishing media : In case of fire use water spray, foam, dry chemical powder or carbon dioxide.
- 5.2) Specific hazard with regard to fire fighting measures : Apply water from a safe distance to cool and protect surrounding area.

6. Accidental Release Measures

Writing ink and Writing Instrument

Absorb spill with material (e.g. dry sand or earth, cloth), then place in a chemical waste containers

7. Handling & Storage

7.1) Handling

- Writing ink : Avoid rough handling of dropping.
: Keep container tightly closed.
: Water protective safety glasses, gloves

7.2) Storage

- Writing ink : Inside storage should be in a well-ventilated, noncombustible location, away from all position source of ignition.
: Follow the local law and regulations in your country
- Writing Instrument : Follow the local law and regulations in your country

8. Exposure control / Personal protection

8.1) Control parameters

Writing ink

- Methyl Isobutyl Ketone 50 ppm. (ACGIH)
n-Butyl Acetate 150 ppm. (ACGIH)
Carbon Black 3.5 mg/m³

8.2) Engineering measures

- 1) Writing ink : Use with local exhaust ventilation
2) Writing Instrument : Not required

8.3) Personal protective equipment

1) Writing ink

- Respiratory protection : Industrial canister gas masks.
- Eye protection : Safety glasses
- Hand, Skin and Body protection : Rubber gloves

2) Writing Instrument

: Not required

9. Physical & Chemical properties

Physical state, form :

- 9.1) Appearance : Liquid
9.2) Color : Black, Red, Blue, Green, Pink, Violet
9.3) Density : 0.844 - 0.870@30.0 °C



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9.4) Flash point	: 15.5 °C (Methyl Isobutyl Ketone)
9.5) Autoignition temperature	: 465 °C (Methyl Isobutyl Ketone)
9.6) Upper and Lower explosion limit	: 7.5 Vol.%, 1.4 Vol.% (Methyl Isobutyl Ketone)
9.7) Boiling point	: 116.2 °C (Methyl Isobutyl Ketone)
9.8) Melting point	: -84 °C (Methyl Isobutyl Ketone)
9.9) Vapor pressure	: 20.25 mmHg@25.0 °C (Methyl Isobutyl Ketone)
9.10) Solubility in water	: Insoluble
9.11) Solubility in	

10. Stability & Reactivity

Writing ink

10.1) Flammability	: Flammable
10.2) Spontaneous combustibility	: Not available
10.3) Reactivity with water	: This material is stable
10.4) Oxidizibility	: This material is stable
10.5) Self-reactivity	: This material is stable
10.6) Stability & Reactivity	: This product is considered a stable material under normal and anticipated storage and handling conditions.

11. Toxicological Information

11.1) Corrosive and irritant properties	: Methyl Isobutyl Ketone Irritant property was noticed by dropping test in to rabbit eye.
	: n-Butyl Acetate Slight irritant was noticed by short time exposure at following part :
	Throat 200 ppm.
	Eye and nose 300 ppm.
11.2) Allergenic and sensitizing effect	: No data
11.3) Acute toxicity	: Methyl Isobutyl Ketone LD50 2080 mg./kg (Rat oral) LDLo 2850 mg./kg (Mouse oral) LD50 23300 mg./m ³ (Mouse Suction) LDLo 4000 ppm./ 15 min (Rat Suction)
	: n-Butyl Acetate LD50 14130 mg./kg (Rat oral) LD50 7056 mg./kg (Mouse oral) LC50 2080 ppm./4 hrs (Rat Suction) LC50 6 mg./m ³ /2hrs (Mouse Suction)



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- 11.4) Sub-chronic toxicity : No data
11.5) Chronic toxicity : No data
11.6) Carcinogenic effects : No data
11.7) Mutagenic effects : No data
11.8) Effects on the reproductive system : No data
11.9) Teratogenic effects : No data

12. Ecological information

Writing Ink

- 12.1) Biodegradability : Methyl Isobutyl Ketone
No data
: n-Butyl Acetate
BOD 0.83 g./g.
- 12.2) Bioaccumulation : Methyl Isobutyl Ketone
No data
: n-Butyl Acetate
log Pow = 1.730
- 12.3) Fish toxicity : No data

13. Disposal consideration

Writing Ink and Writing Instrument

Follow all regulations in your country

14. Transport information

14.1 Writing Ink and Writing Instrument

Follow all regulations in your country

14.2 Writing Ink

- UN Class : Class 3
- UN No : 1993 (Writing Instrument)
: 1210 (Writing Ink)

15. Regulatory information

Writing Ink and Writing Instrument

Follow all regulations in your country

16. Other information

References

The information here is given in good faith, but no warranty, express or implied is made.



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TEST REPORT

NUMBER: TH-64322

APPLICANT: THE PILOTPEN CO., (THAILAND) LTD.
331,331/1-3 SILOM RD.,
BANGRAK, BANGKOK 10500
ATTN: K.WECHAKIT

DATE: DEC 01, 2017

SAMPLE DESCRIPTION:

FOUR (4) PACK SUBMITTED SAMPLE SAID TO BE WHITEBOARD

ITEM NO. : MK-MB
DATE SAMPLE RECEIVED : JUNE 30, 2004

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

CONCLUSION:

TESTED SAMPLES	STANDARD	RESULT
SUBMITTED SAMPLES	EN71 PART 3 : 1994 WITH THE INCORPORATION OF AMENDMENT A1:2000	PASS

PREPARED AND CHECKED BY :
FOR INTERTEK TESTING SERVICES

AUTHORIZED BY :
FOR INTERTEK TESTING SERVICES

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PHANIT HITAPONG
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TEST REPORT

NUMBER: TH-64322

TESTS CONDUCTED

1 **TOXIC ELEMENTS ANALYSIS**
 AS PER EUROPEAN STANDARD ON SAFETY OF TOYS EN71 PART 3 : 1994 WITH
 THE INCORPORATION OF AMENDMENT A1:2000, TOXIC ELEMENTS MIGRATION WERE
 DETERMINED BY INDUCTIVELY COUPLE PLASMA OPTICAL EMISSION
 SPECTROMETRY.

	RESULT IN mg/kg					LIMIT mg/kg
	(A)	(B)	(C)	(D)	(E)	
SOL. BARIUM (Ba)	53	<5	<5	228	61	1000
SOL. LEAD (Pb)	<5	<5	<5	<5	<5	90
SOL. CADMIUM (Cd)	<5	<5	<5	<5	<5	75
SOL. ANTIMONY (Sb)	<5	<5	<5	<5	<5	60
SOL. SELENIUM (Se)	<5	<5	<5	<5	<5	500
SOL. CHROMIUM (Cr)	<5	<5	<5	<5	<5	60
SOL. MERCURY (Hg)	<5	<5	<5	<5	<5	60
SOL. ARSENIC (As)	1	<1	<1	<1	<1	25

REMARK : SOL. = SOLUBLE
 < = LESS THAN
 mg/kg = MILLIGRAM PER KILOGRAM BASED ON WEIGHT OF SAMPLE;
 (A) = MULTICOLOR SILKSCREEN ON METAL
 (B) = BLACK/RED PLASTIC
 (C) = BLUE/GREEN PLASTIC
 (D) = BLACK/RED INK
 (E) = BLUE/GREEN INK

DATE TEST STARTED : JULY 06, 2017
 ***** E N D *****/NP



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TEST REPORT

NUMBER: TH-75709

APPLICANT: THE PILOT PEN CO., (T) LTD.
40/3 MOO 12 BANGBON 5 RD.,
NONGKHAEM SUB-DISTRICT,
NONGKHAEM DISTRICT, BANGKOK 10160

DATE: DEC 01, 2017

SAMPLE DESCRIPTION:

ONE (1) SET OF SUBMITTED SAMPLE SAID TO BE REFILL INK FOR WHITE BOARD MARKER WHICH COMPOSES OF THE FOLLOWING COMPONENTS:

- (A) INK
- (B) PLASTIC CAP
- (C) PLASTIC PACKING
- (D) PLASTIC DROPPER

ITEM NAME : REFILL INK FOR WHITE BOARD MARKER
 MODEL NO. : WBMK-R (BLACK, RED, BLUE, GREEN)
 MANUFACTURER : THE PILOT PEN CO., (T) LTD.
 DATE SAMPLE RECEIVED : JUNE 13, 2005

TESTS CONDUCTED:

AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

CONCLUSION:

TESTED SAMPLES	STANDARD	RESULT
SUBMITTED SAMPLE SET	EN71 PART 3 : 1994 WITH THE INCORPORATION OF AMENDMENT A1:2000	PASS

PREPARED AND CHECKED BY :
FOR INTERTEK TESTING SERVICES

AUTHORIZED BY :
FOR INTERTEK TESTING SERVICES



 CHONNAWAT KAPILLAKAN
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(For) 

 PHANIT HITAPONG
 DIVISION MANAGER
 TOYS, FOOD & HARDLINES DIVISION



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TEST REPORT

NUMBER: TH-75709

TESTS CONDUCTED

1 TOXIC ELEMENTS ANALYSIS

AS PER EUROPEAN STANDARD ON SAFETY OF TOYS EN71 PART 3 : 1994 WITH THE INCORPORATION OF AMENDMENT A1:2000, TOXIC ELEMENTS MIGRATION WERE DETERMINED BY INDUCTIVELY COUPLE PLASMA OPTICAL EMISSION SPECTROMETRY.

	RESULT IN mg/kg										LIMIT
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	mg/kg
SOL. BARIUM (Ba)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1000
SOL. LEAD (Pb)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	90
SOL. CADMIUM (Cd)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	75
SOL. ANTIMONY (Sb)	<5	<5	38	6	<5	<5	<5	<5	<5	<5	60
SOL. SELENIUM (Se)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	500
SOL. CHROMIUM (Cr)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	60
SOL. MERCURY (Hg)	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	60
SOL. ARSENIC (As)	5	<3	<3	<3	<3	<3	<3	<3	4	<3	25

REMARK : SOL. = SOLUBLE
 < = LESS THAN
 mg/kg = MILLIGRAM PER KILOGRAM BASED ON WEIGHT OF SAMPLE;
 (A) = BLACK INK
 (B) = RED INK
 (C) = BLUE INK
 (D) = GREEN INK
 (E) = RED PLASTIC CAP
 (F) = PLASTIC PACKING
 (G) = CLEAR PLASTIC
 (H) = BLACK PLASTIC CAP
 (I) = BLUE PLASTIC CAP
 (J) = GREEN PLASTIC CAP

DATE TEST STARTED : JUNE 16, 2017
 ***** E N D *****/NP